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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/071,456	02/08/2002	David L. Dickerson	MI22-1943	9958

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WELLS ST. JOHN ROBERTS GREGORY & MATKIN P.S.
601 W. FIRST AVENUE
SUITE 1300
SPOKANE, WA 99201-3828

EXAMINER

MAI, ANH D

ART UNIT	PAPER NUMBER
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2814

DATE MAILED: 08/27/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/071,456

Applicant(s)

DICKERSON ET AL.

Examiner

Anh D. Mai

Art Unit

2814

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on 30 July 2002.

2a) ☐ This action is FINAL.

2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) 49-68 is/are pending in the application.

4a) Of the above claim(s) 55-68 is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) 49-54 is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☒ The specification is objected to by the Examiner.

10) ☒ The drawing(s) filed on 08 February 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.

12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:

1. ☐ Certified copies of the priority documents have been received.

2. ☐ Certified copies of the priority documents have been received in Application No. _____.

3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.

15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 6.

4) ☐ Interview Summary (PTO-413) Paper No(s). _____

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other:

DETAILED ACTION

Election/Restrictions

1. Applicant's election without traverse of Group A, claims 49-54 in Paper No. 8 is acknowledged.

Specification

2. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

- (e) the invention was described in-
 - (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effect under this subsection of a national application published under section 122(b) only if the international application designating the United States was published under Article 21(2)(a) of such treaty in the English language; or
 - (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that a patent shall not be deemed filed in the United States for the purposes of this subsection based on the filing of an international application filed under the treaty defined in section 351(a).

3. Claims 49-54 are rejected under 35 U.S.C. 102(e) as being clearly anticipated by Lin et al. (U.S. Patent No. 6,153,478).

Lin teaches a semiconductor construction as claimed including:

- a semiconductor substrate (30) having a trench (38) extending partially therein, the substrate forming a first sidewall periphery of the trench;
- a first masking layer (32a) formed over the semiconductor substrate (30) and comprising a second sidewall periphery of the trench;

a second masking layer (32b) formed over the first masking layer (32a) and comprising a third sidewall periphery of the trench; and
wherein the second sidewall periphery is laterally spaced from the first and third sidewall peripheries, and wherein the third sidewall periphery is laterally spaced from the first sidewall periphery. (See Fig. 5).

With respect to claim 50, the construction of Lin comprises an intermediate construction of an isolation region.

With respect to claim 51, the first masking layer (32a) of Lin comprises silicon oxide and the second masking layer (32b) comprises silicon nitride.

With respect to claim 52, the construction of Lin further includes an insulative material formed along the first sidewall periphery of the trench (38).

With respect to claim 53, the construction of Lin further includes an insulative material partially filling the trench (38).

With respect to claim 54, the construction of Lin further includes:
a first insulative material partially filling the trench (38)
a second insulative material (44) formed over the insulative material.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anh D. Mai whose telephone number is (703) 305-0575. The examiner can normally be reached on 8:30AM-5:00PM.


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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Olik Chaudhuri can be reached on (703) 306-2794. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-7722 for regular communications and (703) 308-7722 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

A.M
August 23, 2002


PHAT X. CAO
PRIMARY EXAMINER